

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Amend claims 1, 2, 6-11, 17 and 18, without prejudice or disclaimer or without acquiescing in the rejections.
2. Add new claims 20-23.
3. Respectfully traverse all rejections.

B. PATENTABILITY OF THE CLAIMS

Claims 1 and 5-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2000-313533 to Masako (“Masako”) in view of JP 55156153 to Ina (“Ina”). Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina and further in view of U.S. Patent No. 6,876,819 to Sawada et al. (“Sawada”). Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina and further in view of JP 57160844 to Fukuda et al. (“Fukuda”). Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina and further in view of JP 2000-335784 to Nobusuke (“Nobusuke”). Claims 7, 8, 10, 11 and 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina and further in view of U.S. Patent No. 6,726,197 to Aoki (“Aoki”). Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina, further in view of Aoki, and further in view of Sawada. Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina, and further in view of Fukuda. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Masako in view of Ina, and further in view of Nobusuke.

Applicants respectfully note that the Office Action does not address claims 18 and 19, which were added in Applicants' April 7, 2008 Amendment.

All prior art rejections are respectfully traversed. In addition, Applicants do not acquiesce in the Office Action's statement that, "[w]ith respect to claims 10 and 11 the method is necessitated by the structure disclosed in claims 7 and 8 above." Office Action at 13. Without acquiescing in the rejections, claims 1, 2, 6-11, 17 and 18 have been amended, and new claims 20-23 have been added.

Claim 1 recites that the control means causes the paper feed cassette to be pushed out from an installed state toward an uninstalled state by the push-out means without commencing the image forming operation, and causes the user to be warned that the number of sheets of the recording medium is insufficient to complete the image forming operation in accordance with the image forming request. Claim 7 recites that the image forming apparatus is structured to withhold commencement of the image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete the image forming job in response to the image forming request. Claim 9 recites that the image forming apparatus is structured to withhold commencement of the image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete the image forming job in response to said image forming request. Claim 10 recites withholding the commencement of the image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete the image forming job in response to the image forming request.

With respect to claims 1, 7, 9 and 10, the Office Action looks to Ina to remedy deficiencies of Masako and concludes that "Ina states in the 'Purpose' section of the abstract that the purpose is to 'prevent an interruption of a process due to insufficient amount of the paper.'

Thus, a printing process must inherently not have begun if there is not enough paper.” Office Action at 4; *see also id.* at 12, 13. The Office Action further states that, “[s]ince the apparatus as disclose [sic] by the references above, is capable of displaying the remaining amounts of paper in cassette (Ina, abstract, lines 6-11) and pushing the paper feed cassette from an installed state to and [sic] uninstalled state (Masako solution section lines 3-6), it is inherent by the structure and references as applied above that the control means of the apparatus is capable of carrying out the functions recited.” Office Action at 4 (regarding claim 1). The Office Action also states that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention to modify the image forming apparatus disclosed by Masako with the teachings of Ina, as discussed above, because the added components will alert the user and apparatus when not enough paper is present for a current job, and allow the apparatus to prevent unnecessary partial printing of a job due to lack of paper.” Office Action at 4-5; *see also id.* at 12, 13.

Applicants respectfully submit that there is no justification for the conclusions that “the added components [of Ina] will ... allow the apparatus to prevent unnecessary partial printing of a job due to lack of paper,” that “a printing process must inherently not have begun if there is not enough paper,” or that “it is inherent by the structure and references as applied above that the control means of the apparatus is capable of carrying out the functions recited.” Despite its stated purpose, Ina appears to discuss only the use of flickering LEDs and an indication of the remaining paper amount. It does not appear to disclose any means by which an image-forming job is withheld or prevented from starting once it is determined that there is an insufficient amount of paper. (Further, Applicants respectfully submit that, contrary to the statement on page 4 of the Office Action, Ina does not disclose causing a paper feed cassette to be pushed out from

an installed state toward an uninstalled state by the push-out means without executing the image forming operation.)

As indicated above, the Office Action relies upon an inherency theory to support the rejections. Inherency, however, “may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999)). Here, the flickering LEDs and an indication of the remaining paper amount simply alert a user of the paper amount. Although Ina does not appear to explicitly foreclose the user from suspending commencement of the printing process in view of that alert, Ina likewise does not foreclose the user from proceeding with the printing process knowing that there is insufficient paper to complete the process without interruption. Thus, Ina does not disclose – inherently or otherwise – any means by which an image-forming job is prevented from starting once it is determined that there is an insufficient amount of paper.

With further respect to claim 10, Applicants respectfully submit that the Office Action does not apply any reference disclosing the feature recited in claim 10 of providing an image forming request from a terminal machine to an image forming apparatus in communication with said terminal machine. In connection with claims 2 and 9, the Office Action states that Sawada teaches, *inter alia*, an image forming apparatus that is configured to communicate with a terminal machine, 1; wherein said image forming request has been received from said terminal machine, 1.” Office Action at 7, 13. Applicants respectfully submit, however, that Sawada does not disclose providing an image forming request from a terminal machine to an image forming apparatus in communication with said terminal machine. Rather, Sawada appears to disclose providing a repair call from the image forming device to a host computer of a support center

after a repair call button on the image forming device is depressed. *See* Sawada at col. 6, lines 1-19.

For the same reasons, Applicants respectfully submit that Sawada does not disclose the feature recited in claim 2 of the image forming apparatus having received the image forming request from the terminal machine. *See* Sawada at col. 6, lines 1-19. (Claim 9 does not recite that the image forming apparatus receives the image forming request from the terminal machine. Thus, Sawada is inapplicable to claim 9 in this regard.)

With further respect to independent claim 10, the Office Action states that Masako discloses an image forming apparatus in combination with a terminal machine. Office Action at page 10. Applicants respectfully note that that statement with respect to claim 10 appears to be inconsistent with its statement regarding claim 2 that the references (*i.e.*, Masako and Ina) as applied to claim 1 “disclose the claimed invention except wherein said image forming apparatus is configured to communicate with a terminal machine ...” Office Action at page 7 (emphasis added).

With respect to claims 4 and 13, claim 4 recites the claimed paper feed cassette as comprising a matching portion made of metal that extends in the vertical direction along the edge of the stored recording medium and matches the recording medium. Claim 13 recites the claimed paper feed cassette as comprising a paper sheet quantifier that in turn comprises a metal portion of said paper feed cassette that extends in the vertical direction along an edge of said one or more paper sheets contained in said paper feed cassette.

Regarding claim 4, the Office Action identifies the “sheet residual quantity detection part 9” of Nobusuke as corresponding to the recited matching portion. Office Action at 9. Regarding claim 13, the Office Action identifies the “sheet residual quantity detection part 9” of Nobusuke

as corresponding to the recited metal portion. Office Action at 16. However, whereas the claimed paper feed cassette comprises the matching portion and metal portion of claims 4 and 13, respectively, the “sheet residual quantity detection part 9” of Nobusuke appears to be outside of the sheet cassette 6. Nobusuke at Abstract, Figs. 1-4. As such, the “sheet residual quantity detection part 9” of Nobusuke does not satisfy the matching portion feature of claim 4 or the metal portion feature of claim 13. Applicants have previously raised this aspect of Nobusuke. If the Examiner maintains the current position regarding the disclosure of Nobusuke, Applicants respectfully request that the Examiner provide further explanation as to how Nobusuke is understood to disclose the recited matching portion and metal portion of claims 4 and 13, respectively.

New claim 20 depends from claim 9 and is submitted to be patentable for at least the same reasons as claim 9.

New claims 21 and 23 depend from claim 10 and are submitted to be patentable for at least the same reasons as claim 10.

New claim 22 depends from claim 7 and is submitted to be patentable for at least the same reasons as claim 7.

C. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. Accordingly, reconsideration and withdrawal of the rejections is respectfully requested, and a formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /H. Warren Burnam, Jr./

Reg. No. 29,366

HWB:ewm
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100